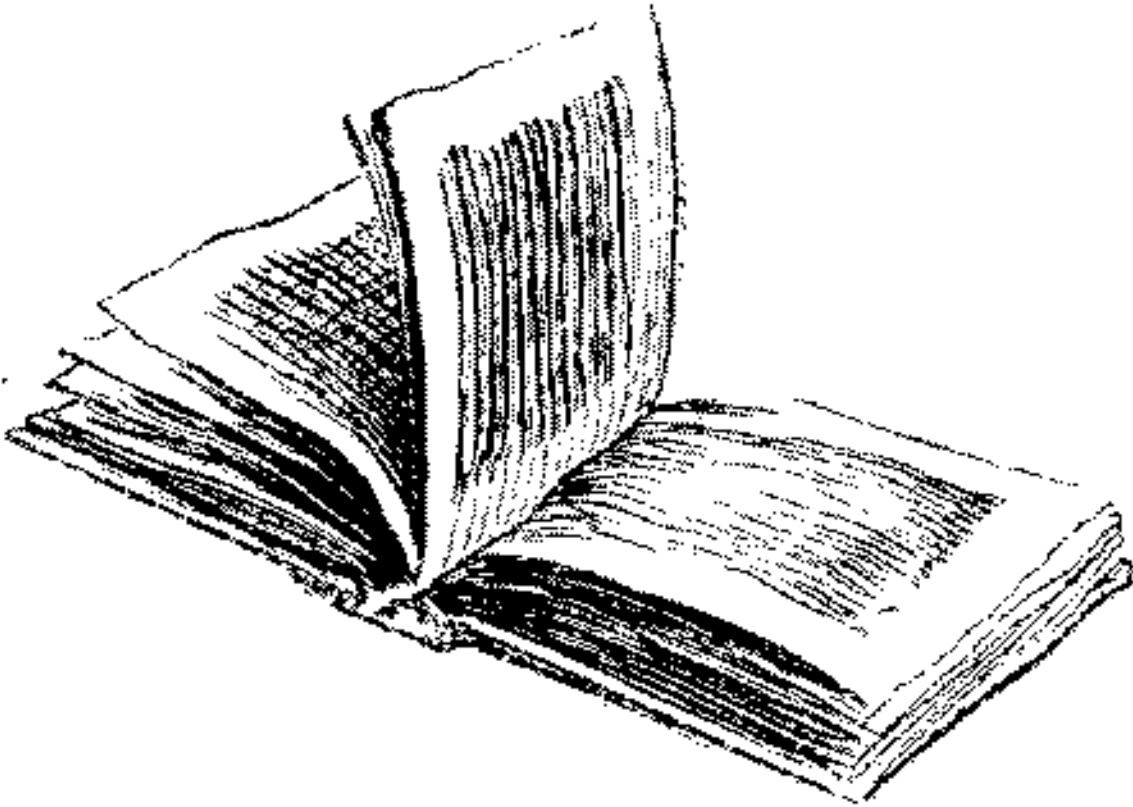


# Executive Summary



# EXECUTIVE SUMMARY

## BACKGROUND

The National Weather Service, NOAA, organized and held a Workshop on International Meteorological Cooperation from January 9-10, 1999, in Dallas, Texas. English speaking representatives from the six WMO Regional Associations, the media, academia and the private sector participated in the Workshop. The goals of the Workshop were to:

- Provide a means for a balanced and fair sharing of all viewpoints on The Future of National Meteorological and Hydrological Services.
- Begin the process of collaboration as a world community to clarify The Role of the Media and Private Sector in the Provision of Weather Services.
- Fully understand the range of perspectives and issues related to Information Access and Exchange, and Use of the Internet.

Prior to the Workshop, each participant identified key issues under each topic. Participants were divided into five tables with each table having representatives from NMHSs, the private sector and academia. A professional facilitator ensured that the discussion stayed focused on the tasks and that each participant had an opportunity to speak and be heard. After discussing a topic at the tables, the Workshop met in plenary to hear the reports from all tables. A NOAA staff member was at each table for technical assistance when needed. A list of participants is in Appendix A.

## SUMMARY OF KEY DISCUSSION POINTS

The discussions of the three topics are discussed in this section with the agenda and/or next steps to be further developed by a task team of the Workshop participants.

### The Future of National Meteorological and Hydrological Services

After reviewing all the issues, the following issues were selected as the highest priorities for discussion by the tables:

1. National needs for weather and climate services, especially for extreme events.
2. Roles of NMHSs vis-a-vis other service providers.
3. International responsibilities and obligations.
4. Adequate governmental support/funding for NMHSs.

All participants acknowledged the dwindling resources, increased demand for more service and the need for all (public and private) members of the meteorological and hydrological community to collectively address the priority issues.

The following statements capture the recurrent themes raised during the table discussions on these issues:

- The need to understand all of the meteorological/hydrological system participants, and their requirements
- The need for improved cooperation and collaboration focused on sharing lessons learned, models of best practices, legislation and other information.
- The decision-makers and the public need to be informed of the value of NMHSs to improve their status, visibility and to ensure ongoing support and funding.
- Funding is critical for NMHSs survivability and there is a need to be creative regarding potential funding sources, efficiency initiatives and partnerships.
- The world community needs to take advantage of the potential roles that the media and private sector might play to support the ongoing viability of NMHSs.
- A mechanism is needed to link and/or integrate the private sector and media into WMO activities.
- Competition must be recognized as a real part of the system but cooperation is critical to meet the collective complex challenges that face the world community.

#### **Role of the Media and the Private Sector in the Provision of Weather Services**

Two tables reviewed all the issues, and then selected the following issues as the highest priorities:

1. Cooperation between NMHSs and media/private sector, especially during emergency situations.
2. Provision of accurate and timely official information to the public, especially during emergency situations.
3. Access to accurate and timely information by the media and private sector.

Both tables chose to discuss ways to improve the cooperation between NMHSs and the media/private sector, especially during emergency situations. Recurrent themes that emerged during these discussions included:

- Both the NMHSs and the private sector need to increase communication and have ongoing discussions.
- The quality of services provided should have some agreed standards and/or a certification process.
- The data that is provided must be accurate and valid.
- There is some overlap in the roles and responsibilities between NMHSs, the private sector and the media. All groups should explore the most efficient and effective ways to share responsibility to meet their collective challenges.
- The media should be utilized to get the accurate warnings out, and to increase the public knowledge, awareness and value of weather services.

#### **Information Access and Exchange, and Use of the Internet**

Three tables reviewed all the issues and then selected the following issues as the highest priorities:

1. Use of the Internet for information access and exchange.
2. Access, availability, and exchange of meteorological and related data and products for disaster mitigation, research and education, and commercial use.

The recurrent themes during the discussion of this topic included:

- The need to make data free and available to all.
- The need for creative methods to fund data access and availability.
- The need for principles and protocols for access to data for the entire community.
- The quality of data issue should be addressed by the community and a method to ascribe a quality “label” to data should be agreed upon.
- A new public/private sector approach to provide overall support to the NMHSs is needed.
- Collaboration by the community is needed to reach a shared vision and solutions to collective data access and exchange challenges.

## NEXT STEPS PROPOSAL REVIEW PROCESS

Overnight, the consultant and staff teams consolidated and integrated the table comments and products and proposed next steps for review by the participants the next day. The proposal included: Operating Principles; Definition of Terms; a Community Agenda with sections on Roles and Authorities, Partnerships, Funding, Education and Awareness, and Data, Products and Technology; and a Model for Managing Cooperation. For each section of the Next Steps Proposal, the following recurrent comments emerged:

- **Operating Principles**: In order to fully understand the principles, several terms used needed an acceptable definition. Several participants suggested that some of the operating principles would fit better in a background piece in the beginning of the Next Steps Proposal document, followed by the appropriate set of principles.
- **Definition of Terms**: Participants generally supported the list provided and offered some additions.
- **Community Agenda**: There was major concern with the concept of a new sponsoring body (to be determined) to include both public and private participants. Many participants thought it was important to look at the existing infrastructure and perhaps add the private sector element for collaborative action and follow up activities. Many comments suggested a role for WMO in follow-up actions from the workshop. Each table provided specific feedback on each section.
- **Model for Managing Meteorological and Hydrological Cooperation**: There was general support for the model with suggestions to shift the order of some of the steps and alter the title slightly.

## NEXT STEPS TO FINALIZE WORKSHOP RESULTS

After some discussion, Dr. Gordon McBean, volunteered to serve as the focal point for a representative group of Workshop participants to collaborate over the next few months to determine the feasibility of suggested actions and strategies offered by the participants as follow-up to the Workshop. Other members of the task team include: Ms. Nancy Cutler, Mr. Kaliba Konaré, Dr. Ivan Obrusnik, Mrs. Patricia Ramirez, Dr. Richard Anthes, Mrs. Inge Niedek, and Mrs. Maria Pirone. It was hoped that the group might prepare something that could be presented to the WMO Cg-XIII.

The closing comments and changes were incorporated in the revision of the Operating Principles, Definition of Terms, Action Plan and Model for Managing Meteorological and Hydrological Cooperation.

## **WORKSHOP CLOSURE**

Participants provided final remarks on what they had learned from the Workshop. These comments are summarized below:

- We need a structure of some sort for all of the stakeholders to collaborate and cooperate.
- We need an effective mechanism for involving the private sector in an ongoing and effective way.
- We must continue to acknowledge the inherent differences between countries and accept that variability is fine.
- WMO Resolution 40 (Cg-XIII) is not fully accepted or understood by all.
- We have a common understanding of our issues and challenges.
- The Workshop process helped increase understanding of each other and the exchange of views.
- This was a constructive dialog.
- We have much to do together.
- This was an interesting learning process.
- This increased our sensitivity to and understanding of the needs of the private sector.
- We truly must all work together for our future.

## **WORKSHOP EVALUATION**

Thirty-eight participants submitted written evaluations. Although many participants would have preferred additional time for both table deliberations and discussion in plenary, the evaluations indicated a 92% satisfaction level of 3 or higher (the scale was from 1 to 5). Ninety-four percent (94%) of the participants selected satisfaction levels of 3 or above with the Workshop format. Finally, 89% of the participants selected a satisfaction level of 3 or higher with the overall Workshop results. Many comments indicated appreciation for the opportunity to participate and share views. The format was different, but generally acceptable as well as helpful to participants. It was apparent that participants would like to see some follow up to the Workshop. While the dialog was useful, many participants want to see action.

# Agenda

## **January 9, 1999 (8:30 – 6:00)**

- 7:30 – 8:15 Registration and Continental Breakfast
- 8:30 – 8:45 Welcome and introductions by Gen. Jack Kelly, Assistant Administrator, NWS, Session Moderator. Overview and session objectives are shared.
- 8:45 – 9:15 Session Facilitator, Lynne Carbone, explains the workshop organization, along with the groundrules for this 1 1/2 day process and the morning's task.
- 9:15 – 12:15 ***The Future of National Meteorological and Hydrological Services.*** Overview of topic by Dr. John Zillman, President of the WMO. Facilitated participant discussion and collaborative problem-solving of issues and solutions. Each table reports and total group discusses results in plenary.
- 12:15 – 1:15 Lunch
- 1:15 – 1:30 Summary of morning session. Review of the afternoon's tasks
- 1:30 – 5:30 ***The Role of the Media and Private Sector in the Provision of Weather Services and Information Access and Exchange, and Use of the Internet.*** Overview of topics by Ms. Nancy Cutler, Director General, National Weather Services, Environment Canada. Facilitated participant discussion and collaborative problem-solving of issues and solutions. Each table reports and total group discusses results in plenary.
- 5:45 – 6:00 Summary and review of Sunday's agenda.

## **January 10, 1999 (9:00 – 12:30)**

- 8:00 – 9:00 Breakfast
- 9:00 – 9:30 Summary of each topic with potential next steps by Lynne Carbone.
- 9:30 – 10:30 Each table provides comments on next steps as a world community.
- 10:30 – 12:15 Full discussion takes place. Agreement on next steps and session evaluation.
- 12:15 – 12:30 Closing remarks.      vii

# Workshop Process Overview

The purpose of the Workshop on International Meteorological Cooperation is to formulate a strategy for planning for the future through a collaborative process. It is critical to have a meeting process and structure to support this objective.

Lynne Carbone & Associates, Inc. is an independent consulting firm in the Washington, D.C. area, with extensive experience and expertise in process consultation. Lynne Carbone, the President of the company, has been employed by the National Weather Service to design a 1 ½ day workshop process to support international cooperation and collaboration on future issues and challenges. She has designed a collaborative problem-solving process by which the highly diverse participants may effectively work toward a consensus approach for the future.

## Collaborative Problem-Solving

The collaborative problem-solving format essentially involves the identification of problems or issues, an exploration of potential solutions and a process of working toward a consensus strategy. In order to achieve full collaboration and consensus, several features must be present in the group process:

- All participants are considered equals around the table. In other words, everyone's input must be valued and accepted equally.
- Everyone must be given the opportunity to participate fully. No single individual or organization may dominate. Time must be fairly allotted to all those participating so that each participant is able to contribute. Discussions must remain focused on the issue and not allowed to "stray".
- In order to reach a consensus, all views must be heard, understood, and considered in the final agreement process. Individuals must make an effort to communicate their point succinctly.
- It is critical that in the problem-solving process, the participants agree on the problem or challenge before moving on to the exploration of solutions. If the problem or challenge is perceived differently by group members, the discussion will automatically lead to conflict since there is already a conflict in the fundamental premise of subject.



## Workshop Format

Approximately 40 individuals are expected to participate in The Workshop on International Meteorological Cooperation. The 40 invitees represent a diversity of organizations, countries, cultures, and business/government/academic sectors. Each individual will come with a set of beliefs, opinions, values, and messages to share with the rest of the workshop. The challenge for the workshop format is to account for the diversity of members and allow for the full input and participation of the range and numbers of folks attending.

For these reasons, portions of the workshop will be conducted utilizing small groups of approximately 8 people at round tables. The process is designed to support discussion, deliberation, and collaboration on focused issues and challenges. Each of the tables will have representation by region and organization type to ensure a full sharing of perspectives and inputs.

After each topic receives table level discussion, the entire workshop will hear the results from each table. The intent is to hear the diversity of views and suggestions and work toward a total workshop consensus strategy. To ensure both effective and balanced participation at each table, a professional process consultant from Lynne Carbone & Associates, Inc. will facilitate and record all table work. Ms. Carbone will oversee and orchestrate the process throughout the 1 ½ days so that each attendee may fully participate in the content discussions. All workshop attendees will have the opportunity to hear from all other participants in an efficient and effective way through this approach.

The structure is intended to support to allow for maximum participation by all attendees and to enable the group to move from discussion into true collaboration and strategy building. It will be difficult to achieve these critical goals if the traditional conference format of panels or a few individuals speaking is employed.

Saturday evening, the consultant team will compile a summary of the day's work and provide the framework to facilitate collaboration and agreement on the next steps for Sunday morning's challenge to formulate and action plan.

## Participant Table Assignments

<b>TABLE #</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Participants</b>	Mukolwe Zou Gordon Amadore Requena Jamie Voss Pirone	Sen Roy McBean Obrusnik Zillman Friday Neidek Smith Morrissette	Obasi Anthes Dania Kelly Lim Alperson Leavitt Myers Beysson	Schulze Tawfig Ramirez Finizio Zaitsev Greenfield Ishibashi Porreca	Konare Cutler Diharto Gartner Fulker Gonzalez Block Hallgren
<b>NOAA Staff</b>	Eustis	Weston	Yerg	Davidson	Tallia
<b>Facilitator</b>	Rioux	O'Connor	Zook	Friedman	Heller